

CANYON MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Environmental Assessment
South River Field Office
EA # OR-105-99-11

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Table of Contents

Chapter 1

Purpose and Need for Action	1
Background	1
Need	2
Purpose	2

Chapter 2

Description of Alternatives	4
I. Alternative 1 - No Action	4
II. Alternative 2 - Replace Existing Towers; No Additional Towers	4
III. Alternative 3 - Maximum Usage Within A Fixed Perimeter	5
IV. Alternative 4 - Minimize Number of Towers	5
V. Elements of the Human Environment That Would Remain Unaffected by Any of the Alternatives	5

Chapter 3

The Affected Environment	6
I. Canyon Mountain Communication Site	6
Table 1- Present Tower Configuration	6
Figure 1 - Current Development Viewed from the East	7
Figure 2 - Panoramic View of Site from Southwest	7
II. Wildlife	8
A. Special Status Species	8
1. Threatened and Endangered	8
Northern Spotted Owl	8
2. Bureau Sensitive	9
3. Bureau Assessment	9
B. SEIS Special Attention Species	9
C. Migratory/Neo-Tropical Birds	10
III. Noxious Weeds	10
IV. Visual Resources	11
V. Cultural Resources	12

Chapter 4

Environmental Consequences	13
I. Canyon Mountain Communication Site	13
II. Wildlife	14
A. Special Status Species	14
B. SEIS Special Attention Species	15
C. Migratory/Neo-Tropical Birds	15
Alternative 1	16
Alternative 2	17
Alternative 3	17
Alternative 4	18
III. Noxious Weeds	18
IV. Visual Resources	19
V. Monitoring	19

Chapter 5

List of Preparers, Agencies and Individuals Contacted or Consulted, and Literature Cited

Individuals, Agencies, and Organizations Contacted or Consulted	20
Preparers	21
Literature Cited	22

APPENDICES

Appendix A - Proposed Site Boundaries Common to Alternatives 3 and 4

Appendix B - “Draft” Electronic and Administrative Site Management Plan

Appendix C - Critical Elements of the Human Environment

Chapter 1

PURPOSE AND NEED FOR ACTION

This chapter provides a brief description of the purpose and need for the proposed action being analyzed in this environmental assessment.

Background

The South River Field Office, Roseburg District, Bureau of Land Management (BLM) administers a communications site on Canyon Mountain in Section 3, T. 31 S., R. 5 W., W.M., on lands allocated as General Forest Management Area within the Matrix. Canyon Mountain is located approximately 22 air miles south of Roseburg, Oregon, and less than 2 miles south of Canyonville, Oregon. The communication site is located at an elevation of 3,394 feet. Site development began in 1929 when an air navigation station was constructed and an electrical distribution line was installed.

The geographic prominence of the site and the availability of electrical service and road access make this a desirable location for siting of communications facilities (towers) and equipment. The BLM has authorized development of the site by a variety of user groups. There are presently 21 parties authorized by the BLM to operate communications facilities on Canyon mountain, including: wireless telephone and paging services; wireless internet service; two-way communications services for private industry, state and federal governmental agencies; television broadcast translators; and FM radio translators.

Based on Federal Communication Commission (FCC) rules for the licensing of wireless telephone services, the BLM training handbook *Siting Wireless Antennas, An Introduction* projected that over the next few years any given market area could be serviced up to nine wireless communication carriers.

The *Roseburg District Proposed Resource Management Plan/Environmental Impact Statement* (PRMP/EIS October 1994. Chapter 2-54) established an objective to “Continue to make BLM-administered lands available for needed rights-of-way where consistent with local comprehensive plans, Oregon statewide planning goals and rules, and the exclusion and avoidance areas identified in this PRMP.” This objective was adopted in the subsequent *Roseburg District Record of Decision and Resource Management Plan* (ROD/RMP June 1995).

A memorandum from President Clinton on August 10, 1995, and The Telecommunications Act of 1996 (P.L. 104-104, February 8, 1996) direct executive departments and agencies to make Federal Government buildings and lands available for siting of mobile service antennas. Agencies are directed to approve siting requests when the proposed use is consistent with federal, State and local laws, rules and regulations.

Need

The communication site is located along a narrow ridge with limited space available for future development. The Roseburg District has a need to develop a management plan governing the development, leasing and operations of communications facilities and services on Canyon Mountain, in order to facilitate orderly management and compatible communication site growth while minimizing impacts to the environment. The ROD/RMP (p. 69) stipulates that “Communication facilities will be allowed on existing communication sites. Existing communication sites will be fully developed with compatible uses prior to developing new sites.” BLM Manual Section 2860.11 directs the BLM to develop site management plans for sites which can accommodate multiple communication users. The manual also stipulates that prospective applicants cannot be required to provide facilities for other occupants in the absence of a completed site management plan.

In addition to providing a site for local communications services, Canyon Mountain has become an important link in the development of wireless telephone services along the Interstate 5 highway corridor. Based on the potential increase in wireless carrier services noted above, the BLM has identified a potential for siting requests on Canyon Mountain by as many as four additional wireless communications servers. Siting of these additional services could require the construction of new free-standing towers up to 199 feet in height, and equipment shelters. It is also anticipated that requests from other smaller, local communication service providers would be received, and that these services could be accommodated by existing towers.

Purpose

The Roseburg District BLM proposes to develop and implement a site management plan that would permit site utilization without degrading the site or sacrificing future development potential. The site plan would establish the conditions under which the Canyon Mountain site would be managed over the next ten years to accommodate current users, and would establish the requirements under which future development would proceed as a means of accommodating anticipated future communication needs. All current and future users of the communication site would be required to abide by the communication site plan and to implement mitigation measures appropriate to their use, as a condition for the issuance or renewal of rights-of-way.

The objectives of the communication site management plan will include:

1. An administrative framework to guide site administration over the next ten years.
2. Identification of the physical limits of potential site expansion.
3. Identification of specific locations within the site perimeter that would be excluded from development.
4. Identification of the maximum number and types of towers that could be located within the communication site boundaries.

5. Requirements for new towers to be designed to accommodate multiple users.
6. Requirements for free-standing towers and prohibitions on construction of any additional guyed towers.
7. Restriction of use to “low power” applications with less than one thousand watts effective radiated power to avoid potential electronic compatibility with higher power applications.
8. Requirements for new applicants to site on existing towers, wherever feasible.

A “draft” administrative and electronic management plan is attached as Appendix B.

This environmental assessment serves to provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI). It will consider the short and long term environmental consequences of no action and the three potential action alternatives, for the physical development of the Canyon Mountain communication site. The alternative selected will form the basis for development of the final administrative and electrical management elements of the plan.

Implementation of any of the proposed action alternatives of this analysis would conform to standards and guidelines contained in the Roseburg District ROD/RMP which is tiered to the analysis contained in the Roseburg District PRMP/EIS. The ROD/RMP and the PRMP/EIS incorporate the standards and guidelines contained in the *Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (April 13, 1994), commonly referred to as the Northwest Forest Plan.

Chapter 2

DISCUSSION OF THE ALTERNATIVES

This chapter describes the alternatives being analyzed in this environmental assessment.

The Interdisciplinary Team and a concerned member of the public identified the issue of potential effects of communications towers on migratory birds. Based on this issue and the management objectives for the site plan, the following alternatives were developed, representing a reasonable range of possible actions. The Interdisciplinary Team considered three action alternatives which would meet the purpose and need identified in Chapter 1. Common to all alternatives, including no action, is the requirement that all users would abide by all legal and regulatory requirements pertaining to communication sites, including; BLM right-of-way authority, FCC licensing. White strobe lighting would be designated for tower lighting, unless other types of illumination are mandated by the Federal Aviation Administration (FAA).

I. Alternative 1 - No Action

This alternative would continue current communication site management practices, with site development authorized on a first-come first-served basis. Site development and/or expansion would occur without the benefit of a management plan to guide growth by establishing minimum standards for physical and electronic site development. Each individual right-of-way request, whether to occupy existing towers or construct new towers would be reviewed on a case by case basis in coordination with existing site users. Any decision to accept, modify or authorize the proposed use would be subject to input from current site users and would require environmental review by the BLM. No communication site boundaries would be established. Both free-standing and guyed towers would be acceptable, with no formal standards relative to tower tower lighting or shelter design. It is possible that towers in excess of 199 feet in height could be proposed. The site would be available for construction of both single-user and multiple-user towers as well as both high-power and low-power applications. Anticipated development would likely require additional access roads and could eventually site more than ten guyed towers and as many as five free-standing towers.

II. Alternative 2 - Replace Existing Towers; No Additional Towers

This alternative would allow for the continued operation and maintenance of existing towers. As towers age or become obsolete, replacement with towers of the same type, height, and illumination would be authorized within the currently developed area. Conversion of guyed towers to free-standing towers would be encouraged, but would not be a requirement for lease renewal. The number and size of authorized towers would be fixed at present levels, and no authorization would be given for the construction of any additional towers or expansion beyond the present site limits. Construction of shelters housing equipment to be mounted on existing towers would be allowed.

III. Alternative 3 - Maximum Usage Within A Fixed Perimeter

A communication site boundary would be established in which an estimated eleven towers would be located. All access, and tower and shelter construction would be confined to the area within the approximate boundaries indicated on the attached map in Appendix A. The eleven towers would include the four free-standing and two guyed towers presently on site, and an estimated five towers to be constructed within the life of this management plan. Conversion of guyed towers to free-standing towers capable of accommodating multiple users would be required at such time as a tower is replaced, or right-of-way renewal is authorized. New towers would be limited to a maximum of 199 feet in height.

IV. Alternative 4 - Minimize Number of Towers

All access and shelter construction would be confined within the approximate site boundaries indicated on the attached map in Appendix A. Conversion from guyed towers to free-standing towers would be required at such time as a tower is replaced, or right-of-way renewal is authorized. New towers would be required to accommodate multiple users. At full implementation, the site would accommodate a maximum of four towers, consisting of two no greater than 90 feet in height, and two no greater than 199 feet in height.

V. Elements of the Human Environment That Would Remain Unaffected by Any of the Alternatives

The following Critical Elements of the Human Environment would remain unaffected by the adoption of any of the alternatives contained in this analysis because the relevant resources do not exist in the project area or no potential consequences to the resources were identified by the Interdisciplinary Team in this analysis: Air Quality; Areas of Critical Environmental Concern; Environmental Justice; Prime or Unique Farm Lands; Floodplains; Native American Religious Concerns; Water Quality, Drinking or Ground; Wetlands/Riparian Zones; Wastes, Hazardous or Solid; Wild and Scenic Rivers; and Wilderness.

Chapter 3

THE AFFECTED ENVIRONMENT

This chapter discusses the specific resources that are present or have the potential to be present within the area, and which could be affected by any of the proposed alternatives.

I. Canyon Mountain Communication Site

The communication site is located on approximately 1 acre along a narrow ridge atop Canyon Mountain, at an elevation of 3,394 feet. The northern aspect of the mountain is forested with conifers, while the southern aspect is dominated by shrubs and grasses. There is young, mid-seral timber immediately adjacent to the site on the northwest, with older timber downslope and to the north. There is also a small stand of older timber located several hundred feet west of the site. Access is provided by Road No. 30-5-31.0, which is controlled by the BLM and the Silver Butte Timber Company. There are presently six permanent towers authorized on site, which accommodate 21 authorized users. There are also two 100-foot high guyed, telescoping towers temporarily located on an old landing located to the east of the communication site which accommodate one additional user. The six permanent towers vary in character from antennas mounted atop utility poles, to a 150-foot tall free-standing tower. All present use is in the low power range, at less than one thousand watts effective radiated power. Table 1 illustrates the heights, types, and illumination of the current permanent towers.

Table 1 Permanent Towers Presently Sited on Canyon Mountain

Tower ID (Right-of-way authorization number)	Height (Feet)	Cable Guyed	Free-standing	Light Sources?/Type
OR3445	24	X		No
OR9877	40	X		No
OR8701	85		X	No
OR23766	90		X	No
OR52109	150		X	Yes/Strobe
OR54679	40		X	No

Figure 1 provides a view of the site and existing towers as seen from the southeast. Figure 2 provides a panoramic view of the site from the southwest.

Figure 1



Figure 2



II. Wildlife

Special Status Species

The PRMP/EIS (Chapter 3-33) identifies special status species as “Species which are limited in abundance and distribution and have identifiable threats to their existence are managed by the Bureau as special status species.” Special status species include those listed as Federally-threatened or endangered under the Endangered Species Act of 1973 (as amended) and species designated as Bureau Sensitive or Bureau Assessment.

Federally-Threatened and Endangered

Four species listed under the Endangered Species Act have been documented on the Roseburg District. These include the Columbian white-tailed deer (*Odocoileus virginianus leucurus*), bald eagle (*Haliaeetus leucocephalus*), marbled murrelet (*Brachyramphus marmoratus*), and northern spotted owl (*Strix occidentalis caurina*). Habitat for the Columbian white-tailed deer, bald eagle, and marbled murrelet is absent within the vicinity of the project area.

Three other species that could potentially inhabit forested stands on the Roseburg District are the Canada lynx (*Lynx canadensis*), the vernal pool fairy shrimp (*Branchinecta lynchi*) and Fender’s blue butterfly (*Icaricia icarioides fenderi*). None of these species have been documented on the Roseburg District, and suitable habitat, prey and forage for these species does not exist in the project area. As a consequence, these species are not expected to inhabit the project area or its vicinity, no impacts to these species would be anticipated and they will not be discussed further in this analysis.

Northern Spotted Owl

Northern spotted owls are known to inhabit forest stands within the same watershed in which the Canyon Mountain communication site is located, but the site is not located within any 100-acre owl activity center, within 0.7 miles of any owl activity center, within any designated critical habitat, nor within the 1.3 mile radius Klamath Province home range of any known owl pairs.

Conifer stands on the north-northeast slopes, adjacent to the communication site are consistent with the description and definition of habitat considered suitable for spotted owl roosting and foraging (SHB2). The absence of large trees with cavities, broken tops and large limbs was noted in field review. The lack of these components, the ridge location of the site, and its distance from any perennial water source make this an unlikely site for occupancy and nesting by spotted owls (Forsman 1984; Hershey 1995; Forsman and Giese 1997).

Bureau Sensitive

The Canyon Mountain communication site is located within 25 miles of documented populations of Del Norte salamanders (*Plethodon elongatus*). This species is also listed as an SEIS Special Attention Species and covered by Survey and Manage and Protection Buffer standards and guidelines. Suitable habitat is characterized by rock-on-rock, talus material in association with riparian areas and/or old-growth timber overstory.

Surface bedrock and accumulations of rock-on-rock material is present on both sides of the mountain, up to the ridge on which the communication site is located. These rock-on-rock accumulations represent suitable habitat. Surveys were conducted for the presence of Del Norte salamanders, with negative results. In the absence of the species, no impacts are anticipated and this species will not be discussed further in this analysis.

Bureau Assessment

The Oregon Megomphix (*Megomphix hemphilli*) snail is a terrestrial mollusk also listed as an SEIS Special Attention Species and covered by Survey and Manage and Protection Buffer standards and guidelines. Surveys of the Canyon Mountain site were conducted, but none of this species of snail were located. No impacts to the species are anticipated, and it will not be discussed further in this analysis.

SEIS Special Attention Species

These species are covered by the standards and guidelines for Protection Buffer and Survey and Manage species contained in the ROD for the Northwest Forest Plan and the Roseburg District ROD/RMP (p. 22). In addition to the two special status species identified above, five other special attention species could inhabit the project area. These include the great grey owl (*Strix nebulosa*), red tree vole (*Arborimus longicaudus*), and three species of mollusks that include the blue-gray tail-dropper (*Prophysaon coeruleum*), the papillose tail-dropper (*Prophysaon dubium*), and Oregon shoulderband snail (*Helminthoglypta hertleini*).

Habitat for the great gray owl is typically characterized by older forest stands in proximity to meadows, at or above 3,000 feet in elevation, though nesting has been documented at elevations as low as 1,700 feet (Huff et al. 1997). The elevation of Canyon mountain is appropriate and meadows are present, but an evaluation within and adjacent to the communication site did not locate any abandoned raptor nests or other suitable nesting platforms that would be typically used by the great gray owl. On this basis, the presence of great gray owls is not expected in the area of the communication site, no impacts would be anticipated, and the species will not be discussed further in this analysis.

The red tree vole is an arboreal mammal that depends upon the canopy of conifer stands for nesting, forage, moisture, cover and travel. Suitable habitat is characterized by conifer stands with trees \geq 10 inches in diameter at breast height (dbh) and \geq 16 inches dbh, with remnant trees or patches of Douglas-fir trees \geq 21 inches dbh, or greater than 120 years old (Biswell et al. 2000). The forest stand adjacent to the communication site was surveyed for red tree vole occupancy in 1999 and 2000. Two trees with potential nests were identified. In addition, resin ducts and conifer clippings characteristic of red tree vole foraging were located. Based on these findings, the stand is considered to be occupied.

Suitable habitat is present for the blue-gray tail-dropper, papillose tail-dropper, and Oregon shoulderband snail. Surveys were conducted for these three mollusk species. Papillose tail-droppers and Oregon shoulderband snails were located east of an existing tower and on the edge of the proposed communication site boundary. No blue-gray tail-droppers were located during surveys.

Migratory/Neo-Tropical Birds

Migratory birds are common throughout the South River Resource Area. Migratory birds fall into two primary categories; those that migrate regionally, and those that are neo-tropical. Neo-tropical birds are those species that migrate to the area during the spring to breed and fledge their young before returning to Mexico, Central and South America in the autumn to overwinter.

Canyon Mountain overlooks the South Umpqua River and West Fork Canyon Creek. General survey information indicates that the area is used by a variety of neo-tropical bird species. There have been 62 species of birds documented in the vicinity of Canyon Mountain, of which 41 species are known to be neo-tropical migrants. Species that live and breed in the area include warblers, jays, grosbeaks, finches, hawks, vireos, sparrows and woodpeckers.

Canyon Mountain does not lie along any of the major Pacific flyways identified at <http://www.nuthatch.birdnature.com/flyways.html>, but it is believed that some species may migrate over Canyon Mountain en route to major flyways that follow the Pacific coast and the crest of the Cascade Mountain Range. Specific information regarding local migratory routes is not available, however.

III. Noxious Weeds

Noxious weeds are present in watersheds throughout the Roseburg District. While exact figures are not available, the BLM Oregon State Office estimated that the acreage of noxious weeds infestation increased at the rate of 14 percent per year between 1985 and 1991 nation wide,

which would equate to approximately 1,000 acres annually on the Roseburg District (USDI, Bureau of Land Management, Roseburg District. *Integrated Weed Control Plan* and Environmental Assessment. 1995. p. 7)

The Oregon Department of Agriculture (ODA) has developed a rating system for noxious weeds comparable to that contained in BLM Manual 9015 - Integrated Weed Management. The ODA Noxious Weed Rating System designates weeds as types “A” “B”, and “T”, equivalent to types “A”, “B”, and “C” described in BLM Manual 9015 - Integrated Weed Management. Species may be classed in multiple categories.

Type “A” are weeds of known economic importance which occur in the State in small enough infestations to make eradication or containment possible; or is not known to occur, but its presence in neighboring states make future occurrence in Oregon seem imminent.

Type “B” are weeds of economic importance which are regionally abundant, but which may have limited distribution in some counties. Where implementation of a fully-integrated statewide management plan is infeasible, biological control shall be the main control approach.

Type “T” are priority noxious weeds designated by the State Weed Board as target weed species on which the ODA will implement a statewide management plan.

Surveys of the Canyon Mountain site have documented the presence of type “B” weeds that include St. John’s wort and bull thistle. These weeds are being managed with biological controls and are not considered a problem. A single yellow starthistle plant was located under one of the towers and was manually removed. Yellow starthistle is listed as a Type “C” (ODA Type “T”) weed under BLM Manual 9015 standards and is considered a target species for control and eradication. Subsequent surveys did not locate any other yellow starthistle. The area will be periodically checked in the future, the appearance of any additional plants.

IV. Visual Resources

The Canyon Mountain site overlooks the city of Canyonville, Oregon and the Interstate 5 highway corridor. The Visual Resource Management (VRM) classification for the communication site is VRM II. Visual resource objectives call for the retention of the existing character of the landscape. Management Actions/Direction in the ROD/RMP (p. 52) specifies that Class II lands be managed for low levels of change to the characteristic landscape, and that management activities should not attract the attention of the casual observer. Changes should repeat the basic elements of form, line, color, texture, and scale found in the predominant features of the characteristic landscape.

V. Cultural Resources

The Canyon Mountain site was first developed as an Air Navigation Site to provide a beacon for early aviators. The air navigation structure is still in use as a communication tower owned by the BLM. The structure is in excess of 50 years old, and so any proposed actions which could affect the tower require consultation with the State Historic Preservation Office (SHPO) under National Register of Historic Places criteria. The potential historical value of the tower was consulted and a determination was made by SHPO that the historical value of the tower was not significant, and that replacement of the tower would not be of consequence. A pedestrian survey did not identify any other cultural or prehistoric resources. None of the alternatives described in this analysis would affect cultural resources, so there will be no further discussion of them in this analysis.

Chapter 4

ENVIRONMENTAL CONSEQUENCES

This chapter discusses how the specific resources identified in this assessment would or would not be affected in the short and long term, by the selection and implementation of the different alternatives described herein. The discussion also identifies the potential impacts or consequences and the cumulative effects that could be expected.

I. Canyon Mountain Communication Site

Alternative 1 would allow for potential expansion of the communication site further along the ridge from the present location, to approximately 2 acres in overall size. Applicants could site single-user towers with no requirement for construction to accommodate multiple users. It is anticipated that the number of towers could increase from the 6 towers presently sited to 15 or more. This estimate is based on licensing requests submitted to the FCC and inquiries from communications providers. The number of illuminated towers would be expected to increase beyond the present level of a single lighted tower. Towers could be constructed as either guyed or free-standing structures without any limitations on tower heights. There would be no restrictions on the power output of individual transmitters, creating the potential for electrical interference problems between various users.

Alternative 2 would prohibit the expansion of the site beyond present boundaries and would only allow for the maintenance or replacement of existing towers. There would be no increase in the current number of towers, tower illumination, or tower heights. As guyed towers are replaced, licensees would be encouraged, but not required to convert to free-standing structures. The construction of additional equipment shelters would be allowed, with the requirement that they are constructed of exposed aggregate or painted in mute earth tones in a flat or matte finish to reduce the likelihood of attracting the attention of the casual observer.

Alternative 3 would allow siting of additional towers and equipment shelters, but only within designated site boundaries. It is anticipated that the number of towers would increase from the 6 presently on site, to a total of 11. All new towers would be required to be free-standing structures not exceeding 199 feet in height. Existing guyed towers would be replaced with free-standing towers upon rights-of-way renewals. BLM requirements on the construction of equipment shelters would dictate use of exposed aggregate or painting in mute earth tones in a matte or flat finish to reduce the possibility of attracting the attention of the casual observer.

Alternative 4 would reduce the number of towers from the 6 presently on site, to a maximum of 4 sited within designated boundaries. As the current towers are replaced, design and construction of new towers would be required to provide accommodation for multiple users. Guyed towers would be

replaced with free-standing towers upon rights-of-way renewals. Tower heights would be limited to two towers not in excess of 90 feet, and two towers not in excess of 199 feet.

II. Wildlife

Special Status Species

Federally-Threatened and Endangered

Northern Spotted Owl

The Canyonville/Canyon Creek Watershed Analysis (Table 19, p. 66) identified the presence of 1,603 acres of suitable nesting, roosting and foraging habitat (SHB1) for spotted owls, within the watershed analysis unit. None of the proposed alternatives would remove suitable nesting habitat, or disturb nesting owls, because the Canyon mountain site is not located within any owl activity center, within 0.7 miles of any owl activity center, within designated critical habitat, or within the home range of any known owl pairs.

Adoption of Alternative 1, the alternative of no action, would potentially allow for expansion of the communication site beyond its present boundaries and could necessitate the removal of up to an acre of timber identified as suitable roosting and foraging habitat for the northern spotted owl. The Canyonville/Canyon Creek Watershed Analysis (Table 19, p. 66) identified the presence 6,692 acres of suitable roosting and foraging habitat (SHB2) within the watershed analysis unit. Removal an acre or less of suitable roosting and foraging habitat over the ten year life of the site management plan which would constitute an approximate 0.01 percent reduction in suitable roosting and foraging habitat. These lands were identified as available for timber harvest over the next 30 years in the ROD/RMP, and the consequences of this harvest on the spotted owl were analyzed in the PRMP/EIS.

Alternatives 2, 3 and 4 would only allow replacement of present towers and/or the construction of new towers and equipment shelters within a defined site perimeter, and over the duration of the ten year site management plan would not require the removal of any timber that would provide suitable roosting and foraging habitat for spotted owls. Vegetation management would be restricted to tree limbing or topping in order to maintain clear, unobstructed beam paths.

The removal of an acre or less of the available roosting and foraging habitat anticipated under Alternative 1 would have a negligible likelihood of affecting spotted owls, resulting in a “may affect, not likely to adversely affect” determination, and requiring informal conferencing with the U.S. Fish and Wildlife Service. Alternatives 2, 3, and 4 would not remove any habitat and would be considered to have “no affect” on the species.

SEIS Special Attention Species

Surveys have been conducted and occupied sites have been identified. These sites would be managed in accordance with the current management direction for these species. The management direction would protect habitat and micro-climate conditions essential to the persistence of these species (FSEIS, 1994; PRMP/EIS, 1994. Chapter 4-50 and 4-51). Therefore, there would be no direct or indirect impacts to red tree voles, papillose tail-droppers or Oregon shoulderband snails as a consequence of the adoption of any of the four alternatives described in this analysis.

Migratory/Neo-Tropical Birds

There have been no studies or surveys documenting bird mortality from collisions with communications towers sited on Canyon Mountain. Consequently, the level of bird mortality, if any, associated with the communication site is unknown.

Literature on the subject of avian mortality documents bird kill resulting from collisions with towers and other structures such as lighted buildings, wind generators, lighthouses, etc. (Herbert and Reese 1995; Trapp 1998).

Tower lighting also contributes to bird mortality. Disorientation and circling flight around lighted buildings and other structures leading to exhaustion and possible death has also been documented (Ogden 1996). Weather conditions also play a role in bird mortality. Under conditions of clear skies or high ceilings most birds travel within 1,500 feet of ground level, though this varies dependent upon the species, headwinds, geographic features, and season. Under conditions of overcast or inclement weather birds may fly at lower altitudes beneath cloud cover in order to locate geographic points of reference. In inclement weather, refraction by moisture droplets of light from navigational beacons increases the illuminated space around towers. Birds are attracted to the light in the absence of other visual reference points, and are reluctant to leave the illuminated area, increasing the risk of collisions with towers, guy wires, and other birds. In daytime conditions guyed towers may also contribute to bird mortality. (Cochran and Graber 1958; Graber 1968; Springer and Cassel 1976; Larkin and Frase 1988)

Tower heights exceeding 199 feet have also been identified as a prime concern in the occurrence of collisions and bird mortality. Limiting tower heights to 199 feet or less above ground level (AGL) has been identified as a mitigation for reducing potential bird collisions and death (Manville 1999). A study identified 77,519 communications towers, nationwide. Of this total, 58,339 towers required lighting under FAA regulations (Shire et. al. 2000). The FCC estimates that digital technology needs will result in the construction of up to an additional 5,000 towers annually. At present, there are an estimated 141 towers in the state of Oregon that are in excess

of 199 feet AGL in height. Presently, there are no towers on Canyon Mountain that exceed 199 feet in height AGL.

Ongoing surveys in New York state indicate that towers greater than 199 feet in height are responsible for the bulk of observed collisions and mortality, especially those towers 400-to-1000 feet or taller (<http://www.towerkill.com/NYR/NYsurveys-data99.1.html>).

There are presently no towers exceeding 150 feet in height. The above cited literature suggests that 200 feet AGL represents the threshold at which tower collisions become a concern. Since there are no towers of this height on Canyon Mountain, the likelihood of collisions is considered low. There is a single illuminated tower, topped with a red strobe light. Literature and research indicate that strobe lights are less likely to attract birds migrating at night, than are fixed beacons.

Although the literature cited above indicates that avian mortality results from communication towers, there is presently no scientific basis for concluding that this mortality has a substantive adverse effect on overall populations of neo-tropical birds. Additionally, there is no basis for concluding that the Canyon Mountain Communication Site, under all alternatives, would represent a substantive risk to the overall neo-tropical bird population.

In assessing the potential consequences of each of the four alternatives, it is only possible to describe them in comparative terms relative to current site development and the identified risk factors. The discussion of potential consequences is based on the assumptions that birds are migrating over or along the ridge on which the site is located, some undefined level of mortality is occurring in association with towers currently sited, and that greater numbers of towers, towers 200 feet or greater in height, and greater numbers of illuminated towers would result in an increase in present mortality levels.

Alternative 1 - No Action

This alternative would pose a greater risk for increased bird mortality, when compared to existing conditions. It is anticipated as many as 9 additional towers could be constructed, some of which could be sited on adjoining ridges, and that as many as 5 of these new towers could be in excess of 199 feet in height. Since this alternative could result in the greatest increase in numbers of towers, sited across the largest surface area, the greatest potential for collisions and death would exist. Tower heights could exceed the 199 foot threshold at which tower collisions become a concern, also resulting in an increased risk of collisions and mortality.

The proliferation of taller towers would increase requirements for illumination. The presence of a greater number of illuminated towers over a larger area could be expected to attract more birds during periods of poor visibility. This would pose the greatest risk to birds resulting from disorientation, collisions with structures or other birds, and circling flight which could result in exhaustion and death.

The number of guyed towers would be expected to increase, resulting in a higher risk of injury or death resulting from collisions with guy wires.

Alternative 2 - Replace Existing Towers; No Additional Towers

This alternative would not change the present levels of risk for bird mortality, when compared to the current conditions. There would be no increased risk of collision and mortality relative to numbers of towers, because there would be no increase in the number of towers. Replacement of existing towers would be restricted to present locations, so the area over which the potential for collision exists would remain static. Presently, the tallest tower on site is 150 feet in height, below the 200 foot threshold identified above, at which the risk of bird collision and mortality is of concern. This alternative would not allow new towers to exceed the heights of those structures they are replacing, so there would be no increase in the risk of collision and death associated with tower height.

There would be no increase in the number of number of illuminated towers, so there would be no increase in the likelihood of bird attraction, disorientation, circling flight and potential mortality from exhaustion or collision, during periods of inclement weather or otherwise poor visibility.

If guyed towers are replaced, conversion to free-standing towers would be required. This would represent the single identifiable change to present conditions, and could result in a reduction in bird injury or death resulting from collisions with guy wires during the day, or at night.

Alternative 3 - Maximum Usage Within A Fixed Perimeter

An estimated 5 new towers would be constructed over the anticipated ten year life of the site management plan. The boundaries of the communications site would be expanded to increase the site by approximately 30 percent. This could result in a moderate increase in the risk of bird collisions and death associated with the number of towers and their spatial arrangement on the landscape. No towers would exceed 199 feet in height, so there would be no increase in risk of collisions associated with the presence of taller towers.

Alternative 3 is anticipated to have a risk to birds migrating at night, similar to that associated with Alternative 1, because it would allow a comparable increase in the number of towers requiring illumination. There is no information available that would indicate whether the confinement of these illuminated towers within fixed site boundaries would reduce that risk, as compared to the expansion to adjoining ridges anticipated under Alternative 1.

This alternative would require that all new towers are free-standing, and that as guyed towers are replaced, they would be replaced with free-standing towers. As a consequence there would be no increase in the risk of bird mortality from collisions with guy wires. The possibility of such collisions and death would be anticipated to decline over the life of the site management plan, as guyed towers currently sited are replaced.

Alternative 4 - Minimize Number of Towers

This alternative would be expected to reduce the likelihood of death arising from tower collisions compared to the other alternatives and existing conditions because it would reduce the number of towers from six to four over the life of the plan. These towers could be sited within the expanded boundaries common to this alternative and Alternative 3, but this limited expansion is not expected to increase the risk of collisions, when coupled with the reduction in tower numbers. No towers would exceed 199 feet in height, so there would be no increase in risk of collisions associated with the presence of taller towers.

This alternative could result in an increased risk of attracting birds migrating at night, and potential increases in mortality as described above, because this alternative would allow for construction of two towers up to 199 feet in height, which would require illumination. This would double the present number of illuminated towers. The risk to birds migrating at night may be lessened by confinement of these towers within fixed site boundaries, as described under Alternative 3.

The alternative would not increase the likelihood of daytime or nighttime collisions of birds with guy wires, because the new towers would be required to be of a free-standing design. The risk of collisions and deaths would be reduced over the life of the site management plan as the guyed towers on site are gradually removed.

III. Noxious Weeds

The BLM has a strategic plan for dealing with noxious weeds which is addressed in the Roseburg District *Integrated Weed Control Plan and Environmental Assessment* (USDI, Roseburg District, 1995). This environmental assessment is tiered to the *Northwest Area Noxious Weed Control Program Environmental Impact Statement* (USDI, Bureau of Land Management, Washington Office, Washington, D.C. 1987) and *The Supplemental Record of Decision for the Northwest Area Noxious Weed Control Program* (USDI, Bureau of Land Management, Washington Office, Washington, D.C. 1987).

There would be no anticipated impacts on populations of noxious as a consequence of the adoption of any of the four alternatives discussed in this analysis. The site will be monitored for reoccurrence of yellow starthistle. If found, the plant(s) will be manually removed. Implementation of the *Integrated Weed Control Plan* will continue in an attempt to lessen the likelihood of the introduction and spread of any additional noxious weed species onto the site, or the transportation of any on-site weeds off-site.

IV. Visual Resources

Alternative 1 would allow expansion of the site beyond its present boundaries, and would allow unchecked increases in the number of towers, and tower heights. This could exceed the objective for 'low level of change' to the visual landscape can could attract the attention of the casual observer. Therefore, Alternative 1 would not meet the objectives for management of VRM II lands.

Implementation of any of the other three alternatives would meet management objectives for lands designated as VRM II, because they would prohibit or limit further site expansion and development, would allow limited additional towers within the existing site, or would reduce the number of towers presently sited. Limitations on tower heights would also reduce the likelihood that they would stand out as anomalies against the backdrop of the timbered ridge.

V. Monitoring

Monitoring would be done in accordance with requirements stipulated on pages 84-86 of the ROD/RMP. Specific monitoring criteria applicable to Wildlife Habitat, Special Status and SEIS Special Attention Species Habitat and Visual Resources are contained in Appendix I of the ROD/RMP (pp. 195-198 and pp. 202-203)

Chapter 5

LIST OF PREPARERS, AGENCIES AND INDIVIDUALS CONTACTED OR CONSULTED, AND LITERATURE CITED

Notice of the initiation of the analysis of this project was first published in the Roseburg District BLM Project Planning Update, Spring 1999. Letters were sent to members of the communication industry and other interested members of the public. A public meeting to discuss the proposed development of a site management plan was held in the Roseburg District Office on July 8, 1999. If a Decision is made to implement one of the alternatives contained in this environmental assessment, a legal notice of the availability of the Decision Record will be published in the *News-Review*.

1. Agencies and Individuals Contacted:

3-Cities Television Club, Inc.
C&D Lumber Company
Cagle Communications, Inc.
California Oregon Broadcasting , Inc.
Citizens Telecommunications Company of Oregon
Day Wireless Systems
D.R. Johnson Lumber Company
Douglas County Communications Division
Douglas County Planning Commission, Les Wilson
Douglas Education Service District
Fred Meyers Radio Shop
Mayor Gloria McGinnis, City of Canyonville, Oregon
Mericom Communications
Mr. Dave Peterson, U.S. Fish and Wildlife Service
Oregon Aeronautics Division
Oregon Department of Forestry/Communications
Raider Communications, Inc.
Ramcell of Oregon
Southern Oregon University/Jefferson Public Radio
Southwest Oregon Television Broadcasting Corporation
Three Angels Broadcasting
Tribal Governments
Umpqua Watersheds, Inc.
United States Cellular

2. The following agencies, organizations, and individuals will be notified of the completion of EA/FONSI:

3-Cities Television Club, Inc.
C&D Lumber Company
Cagle Communications, Inc.
California Oregon Broadcasting , Inc.
Citizens Telecommunications Company of Oregon
CSN International
Day Wireless Systems
D.R. Johnson Lumber Company
Douglas County Communications Division
Douglas County Planning Commission, Les Wilson
Douglas Education Service District
Mayor Gloria McGinnis, City of Canyonville, Oregon
Mericom Communications
Newcom Wireless
Oregon Department of Fish and Wildlife
Oregon Department of Forestry/Communications
Pacific Power
Raider Communications, Inc.
Ramcell of Oregon
Rosenet, Inc.
Southern Oregon University/Jefferson Public Radio
Southwest Oregon Television Broadcasting Corporation
Three Angels Broadcasting
Umpqua Watersheds, Inc.
United States Cellular
U.S. Fish and Wildlife Service
Ronald S. Yockim for Douglas County Commissioners

3. List of Participants/Preparers:

Ed Richardson	Engineering
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Dave Mathweg	Recreation/Visual Resource Management
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Diann Rasmussen	Lands
Fred Larew	Lands/Project Lead/EA Preparer
Joe Ross	Management representative

LITERATURE CITED -

- Biswell, B., M. Blow, L. Finley, S. Madsen, and K. Schmidt. Survey Protocol for the Red Tree Vole (*Arborimus longicaudas*). 32 pp. 2000.
- Cochran, W. W. and R. R. Graber. Attraction of Nocturnal Migrants to Lights on a Television Tower. *Wilson Bulletin* 70:378-380. 1958.
- Forsman, E. D. and A. R. Giese. Nests of Northern Spotted Owls on the Olympic Peninsula, Washington. *Wilson Bulletin* 109(1):28-41. 1997.
- Forsman, E. D., E. C. Meslow, and H. W. Wight. Distribution and Biology of the Spotted Owl in Oregon. *Wildlife Monographs* No. 87. 64 pp. A publication of the Wildlife Society. 1984
- Graber, R. R. Nocturnal Migration in Illinois - Different Points of View. *Wilson Bulletin* 80:36- 71. 1968
- Herbert, E. and E. Reese. Avian Collision and Electrocution. An Annotated Bibliography. California Energy Commission. Publication Number: P700-95-001. 48 pp. 1995.
- Huff M., J. Henshaw, and E. Laws. Great Gray Owl Survey Status and Evaluation of Guidelines for the Northwest Forest Plan. Panel Review. 47 pp. 1997.
- Larkin, R. P. and B. A. Frase. Circular Paths of Birds Flying Near a Broadcasting Tower in Cloud. *Journal of Comparative Psychology* 102:90-93. 1988.
- Manville, A. Avian mortality at communication towers: background and overview. Office of Migratory Bird Management. USDI. U.S. Fish and Wildlife Service. 1999.
- Ogden, L. J. E. Collision Course: The Hazards of Lighted Structures and Windows to Migrating Birds. A Special Report for World Wildlife Fund Canada and the Fatal Light Awareness Program. 46 pp. 1996.
- Shire, G.G., K. Brown, and G. Winegrad. Communications Towers: A deadly hazard to birds. A report compiled by the American Bird Conservancy documenting the killing of 230 bird species. American Bird Conservancy. Washington D.C. 23 pp. 2000.
- Springer, A. M. and J. F. Cassel. The Effects of a Tall Tower on Nocturnal Bird Migration - A Portable Ceilometer Study. *Auk* 93:281-291. 1976
- Trapp, J. L. Bird Kills on Towers and Other Manmade Structures: An Annotated Partial Bibliography (1960-1998). 15 pp. U.S. Fish and Wildlife Service. Office of Migratory Bird Management. Arlington, Virginia 22203. 1998.

USDA Forest Service and USDI Bureau of Land Management. Final Environmental Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl. Feb. 1994.

USDA Forest Service and USDI Bureau of Land Management. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old Growth Related Species Within the Range of the Northern Spotted Owl. April 13, 1994.

USDI Bureau of Land Management. Northwest Area Noxious Weed Control Program Environmental Impact Statement. Washington Office, Washington, D.C. 1985.

USDI Bureau of Land Management. The Supplemental Record of Decision for the Northwest Area Noxious Weed Control Program. Washington Office, Washington, D.C. 1987.

USDI Bureau of Land Management. Integrated Weed Management. BLM Manual 9015. Dec. 2, 1992

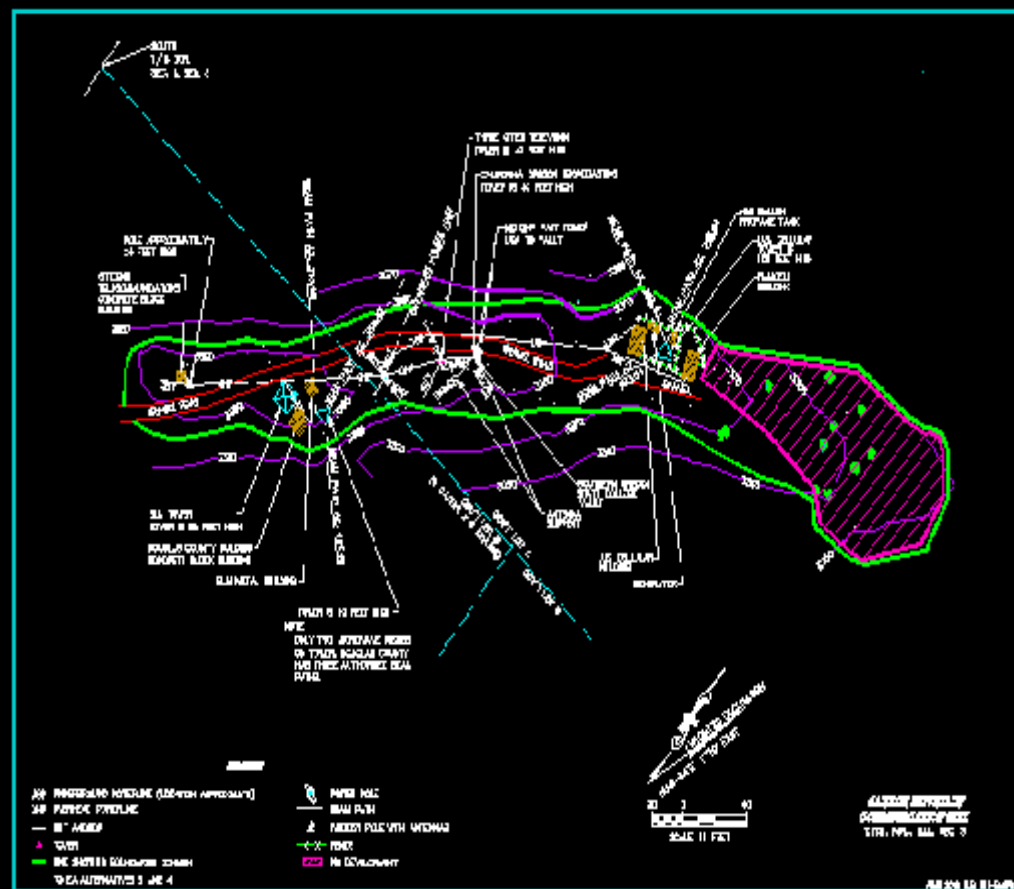
USDI Bureau of Land Management. Integrated Weed Control Plan and Environmental Assessment (EA # OR-100-94-11). Roseburg District. January 1995.

USDI Bureau of Land Management. Roseburg District Record of Decision and Resources Management Plan. June 2, 1995.

USDI Bureau of Land Management. Canyonville/Canyon Creek Watershed Analysis. Roseburg District. December 1998.

APPENDIX A

*Map of the Proposed
Communication Site
Boundaries Common to
Alternatives 3 & 4*



APPENDIX B

“DRAFT” ELECTRONIC AND ADMINISTRATIVE SITE MANAGEMENT PLAN

CANYON MOUNTAIN COMMUNICATION SITE PLAN

I.	<u>Introduction</u>	2
II.	<u>Authority and Authorized Officer</u>	2
III.	<u>Communication Site Management Plan Objectives</u>	3
IV.	<u>Communication Site History and Existing Situation</u>	3
V.	<u>Direction and Criteria for future Development and Management</u>	5
VI.	<u>Design and Construction Parameters</u>	7
VII.	<u>Compliance Procedures</u>	11
VIII.	<u>Communication Site Management Plan Maintenance</u>	12
IX.	<u>Appendices</u>	
	Appendix 1 - Communication Site Standards	
	Appendix 2 - Communication Use Lease / Form 2800-18	

I. Introduction

Canyon Mountain is located near the city of Canyonville in Douglas County, Oregon. The communication site is situated approximately one mile west of Interstate Highway 5 (I-5), in Township 31S, Range 5W, Section 3, Lot 6 and 8, Willamette Meridian, Oregon. Access to the site is via United States Bureau of Land Management (BLM) road number 30-5-31.0. The BLM controls use of the road except for a portion owned by a private landowner. This gated road provides access to the intermingled private and public forest lands and to the communication site. A key to the gate may be obtained at the BLM Roseburg District Office.

The BLM has designated Canyon Mountain as a communication site in the Roseburg District's Resource Management Plan (RMP). The communication site is located on Oregon and California Revested Grant Lands administered by the BLM Roseburg District Office. On June 2, 1995, the RMP and the Roseburg District Record of Decision concluded to fully develop the existing communication sites including the Canyon Mountain Communication Site (CMCS) with compatible electronic uses prior to developing new communication sites. CMCS has limited space for future growth, but due to the road access, geographic prominence, and available 2400-volt electrical service the CMCS is a preferred communication site location.

Several communication companies are studying CMCS for potential site development. In response to this public demand to further develop the CMCS, the BLM awarded to Engineering Design Corporation (EDC), a contract to develop the comprehensive management plan hereinafter called CMCS. The RMP has indicated the following applicable allocation for resource management on and adjacent to the communication site:

1. Visual Resource Management Class (VRM II). VRM Class II designation may constrain some uses with respect to visual criteria.
2. Northern General Forest Management Area (GFMA). The GFMA provides for intensive forest management.

II. Authority and Authorized Officer

In addition to the RMP allocating land for rights-of-ways and communication purposes, a Presidential Document was published in the Federal Register (Vol. 60, No. 156, on Monday, August 14, 1995), which provided for "Facilitating Access to Federal Property for the Siting of Mobile Services Antennas". BLM's Manual Section 2860.11 directs the development of a site management plan for sites which can accommodate numerous communication users.

The BLM Roseburg District's South River Field Office Manager has the delegated authority to implement the plan. Administration of the site will be accomplished according to all present and future policies, rules and regulations governing the use of the site, its facilities and the public land on which the site is located.

III. Communication Site Management Plan Objectives

The objectives of the site plan are to provide for the development of the communication potential of the site in an orderly manner that:

1. Maximizes land use and technological efficiencies in order to reduce the overall physical development of the site.
2. Minimizes conflicts between the existing communication uses and future communication development opportunities.
3. Minimizes conflict between communication site development and other resource values, or site uses.
4. Protects the interest of the communication site users in preserving a safe and compatible environment for all communication site users.
5. Allows for future development to meet anticipated public demand for communication facilities.
6. Reduces the administrative burden of site management for the BLM.
7. Establishes technical standards by which all Canyon Mountain communication site users operate.
8. Identifies areas that are suitable for development within the site boundaries identified under this communication site plan.
9. Encourages the users to establish a user group to provide coordination, information sharing, and consistent site management among all site users

IV. Communication Site History and Existing Situation

Canyon Mountain was first developed as an air navigation tower with commercial power. The site now provides entertainment, business communications, public service, and cellular communication links to the I-5 corridor and the local communities. The site is occupied by low power users, which include two-way radios, paging systems, television and FM radio translators, cellular telecommunications, wireless data transmission, and government communication systems. Site administration is directed by the BLM.

The BLM acquired the navigation tower and erected a communication shelter which is subleased to ten (10) users. The BLM facility, either the shelter or tower or both, is utilized by two-way radio, paging services, FM radio and television translators, wireless data transmission, and cellular telephone. The

BLM shelter is not secure and is near full capacity. The BLM tower is adequate to support additional small users. Other site developments include:

1. A 90-foot tower and shelter for Douglas County. Use of this facility is limited to government agencies. No subleasing rights have been approved for this facility.
2. A 150-foot tower and shelter for U.S. Cellular. Ramcell collocated on the tower and located a shelter within the perimeter of the U.S. Cellular right-of-way. Tower space may be subleased on this facility with the permission of the BLM.
3. Citizens Telecommunication maintains a shelter and subleases space to other users. The top of a guyed 24-foot high power pole serves as an antennae support structure. Other transmit and receive facilities are mounted on the building.
4. Three Cities Television Club has several TV and FM radio facilities mounted on a 40-foot high guyed tower. Each user was issued a BLM authorization to locate on the tower. The receivers and transmitters are located in metal boxes mounted on the tower. The tower is near maximum capacity.
5. California Oregon Broadcasting has a 40-foot tower supported by guy poles.
6. Southern Oregon State College has a single use facility with a buried vault to house the electronic equipment next to the California Oregon Broadcasting tower.
7. SpectraSite Communication, Inc. has located two 100-foot high mobile “crank up” towers on a log landing located east of the developed communication site. This facility provides temporary service for two wireless telephone systems, including Western Oregon Wireless, a Sprint affiliate, and Nextel West Corporation. This temporary facility was authorized pending development of the CMCS. This facility is located outside of the CMCS boundaries discussed below.

A site file was prepared in preparation of this site plan. This file is kept and maintained by the South River Field Office Realty Specialist. The file contains information regarding the current users holding BLM authorizations, and a report prepared to determine the level of exposure to radio frequency electro-magnetic fields (EMF). The current user information includes: copies of the authorizing documents, FCC licenses, Technical Data Reports for each user, and a contour map of the CMCS in one-foot elevational increments.

Site measurements for the EMF report were conducted on September 17, 1999. The report concluded the following: “All areas of the site show EMF values well below the recommended safety limits. The antennas have been placed so as to minimize [human exposure] signal in accessible areas. None of the normal operational changes, which might occur in user’s equipment, such as increases in transmitter power or call volume of mobile systems, or substitution of a different antenna model, are likely to affect these results significantly.”

The proposed communication site boundary map common to Alternatives 3 and 4 of the EA (Appendix A) identifies existing facilities, except for the temporary SpectraSite Communication facilities noted above. The map also identifies areas that are currently considered unavailable for development due to the presence of two identified “Survey and Manage” mollusk species. If the status and management recommendations of the survey and manage species change, the “No Development” area shown on the map may be considered for development.

BLM currently has one application to locate a communication facility on the CMCS. SpectraSite Communications has proposed construction of a multiple user facility at the eastern end of the site boundary to replace the existing temporary facility. This facility would be capable of accommodating four cellular systems and a number of smaller communication systems. The tower would not exceed 199-feet in height. The proposed location is within in the no development area identified on the map in Appendix A, so alternative siting must be considered.

V. Direction and Criteria for Future Development and Management

The following criteria shall provide guidance for future development and management of the site, land use, and user selection decisions:

1. CMCS will continue to be developed and managed for low-power users having Effective Radiated Power of 1000 watts or less. Such uses include two-way radio services, radio and television translators, cellular telephone facilities, and wireless data transmission uses.
2. New site applicants may be required to furnish an intermodulation study or other data pertaining to the effect of the proposed facility on the existing site users, and the environmental impact to the site.
3. The BLM’s Authorized Officer may require future applicants to provide a surety bond or other security to guarantee resolution of any interference problems created by the new user. Resolution may include the relocation of present site users, at the new user’s expense, where interference problems cannot otherwise be resolved, and where consistent with the final management plan.
4. Existing site holders, holding valid BLM authorizations, shall be provided an opportunity to review and comment upon any applications for new communication use of CMCS prior to final action by BLM.
5. Applications for new communications facilities shall be rejected, when the available evidence indicates that there would be significant irremediable interference that is destructive to other users of the site. The mere possibility that interference may occur is not sufficient grounds to deny any application.

6. Right-of-way holders on the CMCS shall be encouraged to form a Canyon Mountain Site Users Association to make recommendations to BLM, negotiate interference problems, and resolve day-to-day operations problems. The users association shall report its recommendations to the Authorized Officer. Disputes between users that cannot be resolved by the association, shall be settled or arbitrated by the Roseburg BLM Authorized Officer. Site administration would be conducted by the BLM in consultation with the user's association.
7. Interference complaints received from site users shall not be considered if their facilities do not meet the minimum site standards established by the site management plan. It is the responsibility of each user to mitigate the interference generated by their equipment.
8. Maximization of the number of uses per building/tower and minimization of the number of buildings, antennas, and towers shall be required to extent possible.
9. A communications site lease with subleasing rights shall be encouraged to accommodate future expansion of the site. Facilities authorized shall be capable of housing multiple users. Whenever technically compatible, new site users will be required to locate in existing facilities.
10. Whenever multiple-user facilities are full, additional multiple-user facilities shall be considered within the context of the final management plan. Applications for new facilities shall include proposed engineering and construction diagrams for review showing the dimension and location to scale of all proposed facilities, above ground features of the facility, access to the facility, and underground conduits and cables for power and control. As-built engineering and construction drawings shall be submitted to BLM after completion of the construction.
11. Whenever the Authorized Officer determines that competitive interest is likely to exist, leases with subleasing rights shall be granted utilizing competitive procedures.
12. Requests for single-user or limited occupancy facilities shall be discouraged. A single-user grant shall be approved only after the applicant successfully demonstrates that it is not possible to locate with an existing multiple-user facility, it is cost prohibitive or technically not feasible to construct a new facility capable of housing multiple-users, and that the request is consistent with the provisions of the final management plan.
13. Structures would be located to take advantage of vegetative and topographic screening while providing maximum service area for telecommunications and minimizing communications interference.
14. The use of gasoline, diesel and similar types of emergency power generating power equipment will not be allowed. The use of propane fueled generators will be allowed.

15. All users shall be required to comply with the Communication Site Standards identified in Appendix 1.
16. Access
 - a) The BLM will pursue the acquisition of legal access to the communication site. The BLM owns or controls all of the access road except one segment located in SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 4, T. 31 S., R. 5 W., W.M.. Until such legal access is acquired, communication site users shall arrange for the use of the privately controlled section of road with the landowner.
 - b) The BLM will not assume responsibility for maintaining the access road solely for communications site access purposes.
 - c) For site security and safety, the CMCS User's Association, if formed, will be allowed to construct and maintain a security gate to control access to the communication site. The BLM's Authorized Officer will approve the location and design of the gate prior to installation.

VI. Design and Construction Parameters

The following design and construction parameters shall provide direction for the physical design and development of new communication facilities or expansion of existing facilities. Detailed requirements for each specific facility to be approved shall be established through lease stipulations based on these Design and Construction Parameters. Additional requirements may be developed for specific proposed facilities.

1. General
 - a) The Authorized Officer shall approve the design and location prior to construction of all new facilities.
 - b) All facilities shall be designed, constructed, and when necessary, landscaped to compliment the natural site features and minimize visual impacts. Architectural design should include low profile buildings.
 - c) Applicants for use of the site shall provide adequate information so that the visual compatibility of the proposed facilities, landscaping, and vegetative changes can be examined while processing the application.
 - d) Facilities shall be designed for future expansion including additions to the building, and antenna supports, as may be required for the original applicant or future sublease.
 - e) Facilities unrelated to communication use shall not be allowed on the site.

- f) The Authorized Officer shall review and approve the fencing material prior to construction. Metal fencing shall be vinyl clad and grounded in accordance to latest National Electrical Code for electrical safety. Fencing color shall be medium gray or color to match the proposed building and surrounding environment.
 - g) Electrical Hazard warning signs shall be installed in compliance with all applicable codes and OSHA standards.
 - h) Communications facilities shall be regularly maintained to present cleanliness and disallow deterioration for function and visual look.
 - i) Latest Uniform Building Code shall be used in the design and construction of new facilities or expansion of the existing buildings or structures to protect against wind, snow, or earthquake based on the available data for the region.
2. Facilities
- a) Communication facilities shall be designed to allow different communication applications and subleasing possibilities.
 - b) Exterior walls of buildings shall be of non-glossy paint or stained with earth tone color approved by the Authorized Officer.
 - c) New buildings shall be restricted to 12 feet in height and have a consistent shape approved by the Authorized Officer.
3. Antennas and Structures Supporting Microwave Dishes
- a) Support structures of microwave equipment and antennas shall be designed by a Professional Structural Engineer certified by the State Of Oregon, possessing experience in the design of similar structures. Structures shall be designed to conform to good engineering practice, supported by structural calculations for wind and snow loading and earthquake requirements stamped by the professional engineer and constructed to accommodate all future anticipated user(s). Tower design shall meet the applicable OSHA requirements for fall protection systems.
 - b) Support structures shall be self-supporting, grouped together in one area, and tie in with site features and terrain. Structures higher than 200 feet shall require a special approval by the Authorized Officer. Tall support structures shall require FAA lights and markings for aviation safety. Structures will only be lit with the minimum lighting required by the FAA, or the Oregon Department of Transportation, Aeronautics Division, for aviation safety. No other tower lighting is permissible.

- c) Guyed antennas shall be discouraged and require special consideration of the Authorized Officer, whenever a self-supporting structure is technically not feasible.
- d) Structural materials shall be fabricated by an experienced tower manufacturer and installed in accordance to the manufacturer's installation instructions and standards for microwave and antenna equipment structures.
- e) In order to minimize the overall height and mass of the antenna structure combining electronic features is required where technically feasible.

4. Facilities Electrical Design Requirements

- a) Electrical facilities, equipment design and installation shall be in accordance to State, Local, and National Codes and standards. Design shall be performed by an electrical engineer certified by the State of Oregon. Licensed electrical contractor shall be bonded and obtain permit from the State or County Electrical Inspector prior to electrical installation.
- b) Effective lightning ground system shall be installed in accordance with the "Cone of Protection" theory and latest NEC requirements to protect the structures for the maximum lightning protection. Equipment grounding system for all electrical equipment, electronic cabinets, and convenience receptacles shall be installed in accordance to latest NEC requirements to protect the life and equipment from the accidental short circuit and lightning faults. All convenience receptacles shall be three-conductor grounding receptacle types. Equipment bonding and grounding shall be in accordance to NEC requirements.

5. Construction Requirements

- a) General contractors and all subcontractors used during facility construction and site development shall be licensed in their trade, fully insured, bonded, and shall comply with all local, state, and federal rules and regulations including OSHA standards and guidelines.
- b) General Contractor or licensee shall obtain a notification of operations permit from the Oregon Department of Forestry in compliance with fire prevention measures and operation of equipment.
- c) Brush removed prior to beginning the site construction shall be piled and burned at site and the ashes shall be used in grading of the site.

- d) Excavated construction materials shall be used to build up the site to a level condition in a manner to promote the land stability, prevent erosion, and provide slopes with the natural contours of the CMCS.
 - e) Contractors and operator of the facility shall prevent all types of pollution and shall remove any construction debris on a daily basis. Storage containers for chemicals or petroleum are not allowed at the site.
 - f) At the completion of construction, the contractor shall vacate the site in a groomed condition, free of potentially hazardous conditions or debris. No construction debris will be burned on site.
6. Protection of Botanical, Wildlife, Visual, and Cultural Resources
- a) Highest priority shall be given by the licensee to protect all native wildlife, botanical, visual and cultural resource values of the CMCS.
 - b) Equipment shelters shall be painted a color approved by the Authorized Officer. Antenna support structures shall be painted and/or lighted in accordance with and approved by the FAA rules and guidelines, and the Oregon Department of Transportation, Aeronautic Division. No tower lighting in addition to the minimum required by those agencies will be authorized.
 - c) No surface disturbing activities or removal of vegetation will be allowed without advance written permission from the Authorized Officer.
 - d) To control the introduction and spread of noxious weeds, all construction equipment shall be cleaned prior to moving onto BLM. Equipment should be pressure washed to remove any possible noxious weed seeds, propagules, or plant parts stuck to or trapped on the equipment.
7. Facility Operation and Maintenance
- a) During the operations of the communication facility the operator shall keep the area free and clear of all debris and potential hazards.
 - b) The equipment shelter and security gate shall be locked at all times.
 - c) Only authorized persons shall be allowed to enter the site. Casual visitors to the site shall be required to show authorization from the licensee with an approved badge and accompanied at all times while at the site with an authorized operator of the facility. The licensee shall proportionally share in the maintenance cost of the access road to the site as directed by the BLM.

- d) Licensee shall provide to BLM day and night telephone numbers of licensee's contact person for any notice or instruction or emergency requirements.
- 8) Facility Termination and Restoration
- a) Excepting the sale or transfer of the facility to another licensee, all above ground equipment, facilities, fencing, underground conduits and cables shall be removed from the site after termination of the operating license.
 - b) The concrete foundations will be removed and excavated area backfilled with clean material. The site shall be returned to its natural condition by replanting the native plants and trees at the locations from where it was removed prior to the construction of the facility or as practicable.
 - c) In the vicinity of grassy bald, the road banks shall be strictly monitored for erosion. The road banks shall be seeded with naturally occurring grasses consistent with the surrounding area as directed by the BLM.

VII. Compliance Procedures

1. Existing and new CMCS users holding BLM rights-of-way or leases, will be monitored by the BLM's Authorized Officer. Monitoring will be conducted annually to determine user's compliance with the terms and conditions of the authorizing document, all applicable rules and regulations, and conformance with the CMCS. A copy of Lease Form 2800-18 is attached as Appendix 2.
2. Those users found to be in noncompliance will be provided with written notice and provided a reasonable time to comply. Failure to correct the noncompliance would result in administrative action to rectify the noncompliance in accordance with the terms and conditions of the authorizing document and applicable regulations.
3. Compliance inspections will be conducted during construction and immediately upon completion of construction. After construction, compliance evaluations of the outside facilities will be conducted randomly on an annual basis. Compliance evaluation of the shelters will be coordinated with the holder so a representative may be in attendance.

VIII. Communication Site Management Plan Maintenance

Frequency of Plan Update

- a) Every ten (10) years; or
- b) Whenever a new facility is planned and an unusual problem(s) arises which the current plan does not provide clear and convincing solution, the CM CSP shall be reviewed for possible update to resolve the concern.

IX. Appendices

1 - Communication Site Standards

2 - Lease Form 2800-18

Appendix 1

Canyon Mountain Communication Site (CMCS) Technical Standards

November 8, 2000

Prepared for BLM

by

2000 Engineering Design Corporation

Table of Contents

A. Required Minimum Standards	1-1
B. Additional Standards	1-1
C. Site Cleanup and/or Improvements	1-2

A. Required Minimum Standards

1. All communications system equipment, including antenna systems and feedline including wires and cables shall be installed and maintained in a good workmanship, neat, clean, and orderly manner for a permanent installation secured firmly in place, electrically and mechanically.
2. Transmission line shall be jacketed heliax type only and shall be secured to transmission tower in accordance to the manufacturer's specifications and installation instructions. Use of unjacketed transmission is not allowed. Insulated tie wraps or insulated clamps shall be used. Wrap lock is not allowed to secure transmission line to the tower.
3. Feedline shall use double shielded, double braided, or heliax coaxial cable. RG-8 cable is not allowed.
4. A copy of current FCC license, name, address, and telephone number of the responsible person for equipment maintenance, receiver frequency, transmit/receive tone frequencies, and transmit power and frequency shall be maintained by each transmitter licensee. Each transmitter shall be identified with a copy of the current FCC license.
5. Antennae shall not be relocated after tests and approved location for mounting. Radios shall be of "Accepted Type" for the approved application.

B. Additional Standards

Site users shall use following additional standards for existing and new installations, if necessary to avoid interference to other users of Canyon Mountain Communications Site (CMCS):

1. Superconducting and/or adaptive type filters, consisting of low-pass, high-pass, bandpass, and/or band reject (or notch) filters, to discard all unwanted signals, shall be used by a new licensee. Filter design shall be either Butterworth, Tchebysheff (Chebyshev), Cauer, or Bessel type.
2. American National Standard Institute (ANSI) Standard C95.1-1992 developed by Institute of Electrical and Electronic Engineers (IEEE) and adopted by ANSI, and latest FCC guidelines from the Office of Engineering and Technology (OET), OET Bulletin No 65, shall be used by each licensee to limit electromagnetic frequencies to worker or human exposure.

3. Transmitters shall have a bandpass cavity to provide following attenuation:
 - a) 30-50 MHz, 20 db attenuation at 500 Khz
 - b) 70-88 MHz, 10 db attenuation at 1 MHz
 - c) 130-170 MHz, 10 db attenuation at 350 Khz
 - d) 400-520 MHz, 5 db attenuation at 1 MHz
 - e) 600-6000 MHz, 5 db attenuation at 250 Khz
4. Isolator shall be installed between the transmitter and cavity filter of the antenna with a minimum of 40 db attenuation in the opposite direction of the transmitter conducting RF energy in one direction.
5. Ring or Wilkinson type hybrid, and/or cavity combiners and duplexers shall be utilized to combine different discrete frequencies from two, or multiple paths onto one path or for more than one user.
6. Insulated guy wires to bond across clevises, brackets, etc. Loose wires or metal objects on towers are not allowed.
7. Connectors of "N" type is preferred against coax connectors with adaptors.

C. Site Cleanup and/or Improvements

1. Combine more than one user on a given facility as suggested above.
2. Whenever, a new user locates a facility or existing user modifies its facility on CMCS, it will be the user's responsibility to limit the maximum permissible exposure (MPE) limit specified by above referenced ANSI standards and OSHA requirements, and to comply with OET Bulletin 65.
3. Cost of consolidation of existing users and/or review, and relocation of 2400-volt overhead electrical distribution and service lines in accordance to IEEE standards for electrical overhead distribution lines, to open additional space for new user(s) shall be borne by the proposed new user(s).

End of Technical Standards

Appendix 2

Communication Use Lease

Form 2800 - 18

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COMMUNICATIONS USE LEASE

Issuing Office

Serial Number

(Lessee Name)

of

(Billing Address - 1)

(Billing Address -2)

(City)

(ST)

(Zip Code)

THIS LEASE, dated this _____ day of _____, 20 ____, by and between the UNITED STATES OF AMERICA, acting through the Bureau of Land Management, Department of the Interior (hereinafter called the "United States" or "Bureau of Land Management"), as authorized by the Act of October 21, 1976, (90 Stat. 2743; 43 U.S.C. 1701, et seq.), and _____, its agents, successors, and assigns (hereinafter called the "Lessee").

The United States and the Lessee are jointly referred to herein as the "Parties. As used herein, the "Authorized Officer" refers to the Bureau of Land Management official having the delegated authority to execute and administer this lease. Generally, unless otherwise indicated, such authority may be exercised by the Area Manager or District Manager for the public lands wherein the following described lands are located.

The United States, for and in consideration of the terms and conditions contained herein and the payment to the United States of a rental in advance by the Lessee, does hereby grant to the Lessee a lease for the following described lands in the County of _____, State of _____; _____, (hereinafter called the "Property").
(Legal Description)

The Lessee accepts this lease and possession of the property, subject to any valid existing rights, and agrees not to use the property, or any part thereof, except as a site for only the construction, operation, maintenance, and termination of a communications facility.

The location of the property is known generally on the site plan dated _____ for the _____ Communications Site which is attached and made part hereof as Exhibit A.

The dated and initialed exhibit(s), attached hereto, are incorporated into and made a part of this instrument as fully and effectively as if they were set forth herein in their entirety.

The parties agree that this lease is made subject to the following terms and conditions.

I. TENURE, RENEWAL AND TRANSFERABILITY

A. This lease will terminate at one minute after midnight on _____. Termination at the end of the lease term occurs by operation of law and does not require any additional notice or documentation by the Authorized Officer. This lease is not renewable; but the Lessee has the right to request a new lease pursuant to paragraph "C" below.

B. The Lessee will undertake and pursue with due diligence construction and operation that is authorized by this lease. To the extent specified in Exhibit _____, operation will commence on _____.

(Date)

This lease will terminate if operation does not commence by that date, unless the parties agree in writing, in advance, to an extension of the commencement date.

C. If the Lessee desires a new lease upon termination of this lease, the Lessee must notify the Authorized Officer accordingly, in writing. The notice must be received by the Authorized Officer at least one year prior to the end of the lease term. The Authorized Officer will determine if the use should continue and, if it is to continue, if a new lease should be issued to the Lessee and under what conditions. The Authorized Officer will require payment of any amounts owed the United States under any Bureau of Land Management authorization before issuance of another authorization.

- D. This lease is assignable with prior written approval of the Authorized Officer. Renting of space does not constitute an assignment under this clause.

II. RENTAL

- A. The Lessee must pay in advance an annual rental determined by the Authorized Officer in accordance with law, regulation, and policy. The annual rental will be adjusted by the Authorized Officer to reflect changes in fair market value, annual adjustments using the Consumer Price Index-Urban (CPI-U), changes in tenant occupancy, or phase-in of rental, if applicable.
- B. After the initial rental period rental payments are due at the close of the first business day after January 1 of each calendar year for which a payment is due. Payments due the United States for this use must be deposited at _____ in the form of a check or money order payable to Bureau of Land Management, DOI. Credit card payments (VISA and Mastercard) can be made in person, through the mail, or by telephone. This lease will terminate automatically if accrued rent is not received by the Bureau of Land Management within 90 calendar days after the initial due date for the payment of such rent.
- C. Pursuant to the Federal Claims Collection Act of 1966, as amended, et seq., regulations at 7 CFR Part 3, Subpart B and 4 CFR Part 102.31, U.S.C. 3717, an interest charge will be assessed on any amount due but not received by the due date. Interest will accrue from the date the payment was due. Administrative costs will also be assessed in the event that two or more billing notices are required for unpaid accounts. In addition, an administrative penalty at a percentage rate prescribed by law or regulation will be assessed for failure to pay any portion of the debt that is more than 90 days past due. This paragraph survives the termination of this lease, regardless of cause.

Other late fee charges may be assessed in accordance with standard BLM accounting procedures and policy.

- D. Disputed rentals are due and payable on or before the due date.

III. RESPONSIBILITIES OF THE LESSEE

- A. The Lessee is authorized to rent space and provide other services to customers and/or tenants and may charge each customer/tenant a reasonable rental without discrimination for the use and occupancy of the facilities and services provided. The Lessee must impose no unreasonable restrictions nor any restriction restraining competition or trade practices. By October 15th of each year, the Lessee must provide the Authorized Officer a certified statement,

listing all tenants and customers, by category of use, located within the facility on September 30th of that year.

- B. All development, operation and maintenance of the authorized facility, improvements, and equipment located on the property must be in accordance with stipulations in the communications site plan approved by the Authorized Officer. If required by the Authorized Officer, all plans for development, layout, construction, or alteration of improvements on the property as well as revisions of such plans, must be prepared by a licensed engineer, architect, and or landscape architect. Such plans must be approved in writing by the Authorized Officer before commencement of any work. After completion, as-built plans, maps, surveys, or other similar information will be provided to the Authorized Officer and appended to the communications site plan.
- C. The Lessee must comply with applicable Federal, State, county, and municipal laws, regulations and standards for public health and safety, environmental protection, siting, construction, operation, and maintenance in exercising the rights granted by this lease. The obligations of the Lessee under this lease are not contingent upon any duty of the Authorized Officer, or other agent of the United States, to inspect the premises. A failure by the United States, or other governmental officials, to inspect is not a defense to noncompliance with any of the terms or conditions of this lease. Lessee waives all defenses of laches or estoppel against the United States. The Lessee must at all times keep the title of the United States to the property free and clear of all liens and encumbrances.
- D. Use of communications equipment is contingent upon the possession of a valid Federal Communications Commission (FCC) or Director of Telecommunications Management/Interdepartmental Radio Advisory Committee (DTM/IRAC) authorization, and the operation of the equipment is in strict compliance with applicable requirements of FCC or IRAC. A copy of each applicable license or authorization must at all times be maintained by the Lessee for each transmitter being operated. The Lessee must provide the Authorized Officer, when requested, with current copies of all licenses for equipment in or on facilities covered by this lease.
- E. The Lessee must ensure that equipment within his or her facility (including tenant and customer equipment) operates in a manner which will not cause harmful interference with the operation of existing equipment on or adjacent to the communications site. If the Authorized Officer or authorized official of the Federal Communications Commission (FCC) determines that the Lessee's use interferes with existing equipment, the Lessee must promptly take the necessary steps to eliminate or reduce

the harmful interference to the satisfaction of the Authorized Officer or FCC official.

- F. When requested by the Authorized Officer, the Lessee must furnish technical information concerning the equipment located on the property.

IV. LIABILITIES

- A. The Lessee assumes all risk of loss to the authorized improvements.
- B. The Lessee must comply with all applicable Federal, State, and local laws, regulations, and standards, including but not limited to, the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq., the Comprehensive Environmental Response, Control, and Liability Act, 42 U.S.C. 9601 et seq., and other relevant environmental laws, as well as public health and safety laws and other laws relating to the siting, construction, operation, and maintenance of any facility, improvement, or equipment on the property.
- C. The Lessee must indemnify, defend, and hold the United States harmless for any violations incurred under any such laws and regulations or for judgments, claims, or demands assessed against the United States in connection with the Lessee's use or occupancy of the property. The Lessee's indemnification of the United States must include any loss by personal injury, loss of life or damage to property in connection with the occupancy or use of the property during the term of this lease. Indemnification must include, but is not limited to, the value of resources damaged or destroyed; the costs of restoration, cleanup, or other mitigation; fire suppression or other types of abatement costs; third party claims and judgments; and all administrative, interest, and other legal costs. This paragraph survives the termination or revocation of this lease, regardless of cause.
- D. The United States has no duty, either before or during the lease term, to inspect the property or to warn of hazards and, if the United States inspects the property, it will incur no additional duty nor any liability for hazards not identified or discovered through such inspections. This paragraph survives the termination or revocation of this lease, regardless of cause.
- E. The Lessee has an affirmative duty to protect from damage the land, property, and interests of the United States.

User notes for optional clause E(1):

1. Use clause E(1) in conjunction with clause E in situations in which the Authorized Officer determines

that the risk to public lands, resources, or interest is greater than the Lessee's assets or ability to correct.

2. If Lessee is a State or political subdivision thereof and such entity has statutory or constitutional authorities limiting the amount of liability or indemnification payable, the Authorized Officer must prepare a risk assessment to determine the United States' potential for losses due to personal injury, loss of life, or property damage caused by the State's use or occupancy. If the Authorized Officer determines, through the risk assessment that the potential for injury, loss, or damage caused by the State's use or occupancy is in excess of the State's liability limitation, the State must procure, as a requirement to be fulfilled before execution of this lease, insurance (see below), and name the United States, together with the State, as an insured on the policy(s), in the amount determined in the risk assessment that exceeds the State's liability limitation.

E(1). The Lessee must maintain \$ _____ worth of insurance coverage, naming the United States additionally insured on the policy (ies), to partially fund the indemnification obligations of the Lessee for any and all losses due to personal injury, loss of life, or property damage, including fire suppression and hazardous waste costs. The Lessee must furnish proof of insurance (such as a surety bond, or certificate of insurance) to the Authorized Officer prior to execution of this lease and verify annually, and in writing, the insurance obligation to the Authorized Officer. The Authorized Officer may allow the Lessee to replace, repair, restore, or otherwise undertake necessary curative actions, to the satisfaction of the Authorized Officer, in order to mitigate damages in addition to or as an alternative to monetary indemnification.

- F. In the event of any breach of the lease by the Lessee, the Authorized Officer may, on reasonable notice, cure the breach for the account at the expense of the Lessee. If the Bureau of Land Management at any time pays any sum of money or does any act which requires payment of money, or incurs any expense, including reasonable attorney's fees, in instituting, prosecuting, and/or defending any action or proceeding to enforce the United States rights hereunder, the sum or sums so paid by the United States, with all interests, costs and damages will, at the election of the Bureau of Land Management, be deemed to be additional rental hereunder and will be due from the Lessee to the Bureau of Land Management on the first day of the month following such election.

V. OTHER PROVISIONS

- A. **Nondiscrimination.** The Lessee must at all times operate the described property and its appurtenant areas and its buildings and facilities, whether or not on the property, in full compliance with Title VI of the Civil Rights Act of 1964 and all requirements imposed by or pursuant to the regulations issued thereunder by the Department of the Interior and in effect on the date this lease is granted to the end that no person in the United States will, on the grounds of race, sex, color, religion, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any of the programs or activities provided thereon.

B. **Termination and Suspension.**

1. **General.** For purposes of this lease, termination and suspension refer to the cessation of uses and privileges under the lease.

"Termination" refers to an action by the Authorized Officer to end the lease because of noncompliance with any of the prescribed terms, abandonment, or for reasons in the public interest. Termination also occurs when, by the terms of the lease, a fixed or agreed upon condition, event, or time occurs. For example, the lease terminates at expiration. Termination ends the Lessee's right to use the public land for communication purposes.

"Suspension" is a temporary action and the privileges may be restored upon the occurrence of prescribed actions or conditions.

2. This lease may be suspended or terminated upon breach of any of the terms or conditions herein or upon nonuse, or when in the public interest. Nonuse refers to a failure to operate consistently the facilities on the property for any period during the term in excess of 180 days. When suspended or terminated in the public interest, the Lessee will be compensated subject to the availability of appropriated funds. Compensation will be based upon the initial cost of improvements located on the lease, less depreciation as allocated over the life of the improvements as evidenced by the Lessee's Federal tax amortization schedules.
3. Except in emergencies, or in case of nonuse, the Authorized Officer will give the Lessee written notice of the grounds for termination or suspension and a reasonable time, not to exceed 90 days, to complete the corrective action. After the prescribed period, the Bureau of Land Management is entitled to such remedies as are provided herein.

4. Any discretionary decisions or determinations by the Authorized Officer on termination or suspension are subject to appeal in accordance with the regulations in Title 43, Code of Federal Regulations.

C. **Restoration**

1. In the event the Authorized Officer decides not to issue a new lease, or the Lessee does not desire a new lease, the Lessee must, prior to the termination of this lease, restore and stabilize the site to the satisfaction of the Authorized Officer.
2. In the event this lease is terminated for noncompliance, the Lessee must remove all structures and improvements within a reasonable period as determined by the Authorized Officer, except those owned by the United States, and must restore the site as nearly as reasonably possible to its original condition unless this requirement is otherwise waived in writing by the Authorized Officer.
3. If the Lessee fails to remove all structures or improvements within the prescribed period, they will become the property of the United States and may be sold, destroyed, or otherwise disposed of without any liability to the United States.

- D. **Members of Congress.** No member of or Delegate to Congress or Resident Commissioner may benefit from this lease either directly or indirectly, except when the lease provides a general benefit to a corporation.

- E. **Reservations.** This lease is granted subject to the following reservations by the United States:

1. The right to all natural resource products now or hereafter located on the property unless stated otherwise herein, and the right to obtain, utilize, or dispose of such resources insofar as the rights and possession of the Lessee are not unreasonably affected.
2. The right to modify the communications site plan as deemed necessary.
3. The right to enter upon the lease and inspect all facilities to assure compliance with the conditions of this lease.
4. The right of the United States to use or to authorize the use of the property for compatible uses, including the subsurface and air space.

In the event of any conflict between any of the preceding printed clauses or any provisions thereof and any of the following clauses or any provision thereof, the preceding printed clauses control.

User Note: Additional conditions may be added as an exhibit to address special concerns.

ACCEPTED this ____ day of _____, 20____, I, the undersigned have read, understand and accept the terms and conditions of this lease.

(Lessee)

User Note: If a corporation is the Lessee, the title of the duly authorized official signing on behalf of the corporation should be added to the signature block.

IN WITNESS WHEREOF, the Bureau of Land Management, by its Authorized Officer, has executed this lease on the day and year first written above.

UNITED STATES OF AMERICA

(Signature of Authorized Officer)

(Title of Authorized Officer)

(Printed Name of Authorized Officer)

(Date)

APPENDIX C

CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order. These resources or values either **not present** or **would not be affected by the proposed actions or alternative**, unless otherwise described in this EA. This negative declaration is documented below by individuals who assisted in the preparation of this analysis.

ELEMENT	NOT PRESENT	NOT AFFECTED	IN TEXT	INITIALS	TITLE
Air Quality					
Areas of Critical Environmental Concern					
Cultural Resources					
Environmental Justice					
Farm Lands (prime or unique)					
Floodplains					
Non-Native and Invasive Species					
Native American/Religious Concerns					
Threatened or Endangered Wildlife Species					
Threatened or Endangered Plant Species					
Wastes, Hazardous or Solid					
Water Quality Drinking/Ground					
Wetlands/Riparian Zones					
Wild & Scenic Rivers					
Wilderness					